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Letters

Eye vs. ear

Your article on PET scans and music comprehension ("Going with the flow of musical brains," SN: 7/11/92, p.21) perhaps betrays an innate bias on the part of the researchers. I would suggest that the term "accomplished pianist" is a euphemism for "one who has been conditioned to experience music by sightreading of musical notation." The channeling of musical comprehension into a system of notational symbology naturally favors certain specific cerebral areas, as does any form of reading.

But to focus only on classically trained musicians does a disservice to those who "play by ear," who have learned to "think in music" rather than read it. How many classically trained musicians are there who are totally incapable of freely improvising when deprived of their sheet-music crutches? Many of the

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Cover: The hot, churning gases in the sun's atmosphere, as depicted in this X-ray image taken by a satellite called Yohkoh, illustrate the kind of turbulent activity that can set the stage for solar flares. New detectors, including telescopes aboard Yohkoh, have begun recording several types of solar radiation — the fingerprints of flares — in unprecedented detail. (Image: Keith Strong *et al.*, Lockheed/University of Tokyo/National Astronomical Observatory)

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Science Service, a nonprofit corporation founded in 1921, gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Program it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the *Directory of Student Science Training Programs for Precollege Students*.

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world's great musical traditions bypass the process of musical notation as too limiting. I cite, for example, most true jazz and the entire body of Hindu classical music: an extremely complex system that divides the octave into 22 notes and is passed on purely "by ear" from teacher to pupil, with no notation whatsoever. What would PET scans show in a case like this? Would the areas of primary activity shift from the left cerebral hemisphere to the right?

Phil Mayhew
Beersheba Springs, Tenn.

PET studies of musical improvisation and other aspects of musical performance are now being conducted or submitted for publication by the Canadian scientists who studied the brains of classical pianists.

— B. Bower

Fun with fullerenes

I'd like to suggest that the name used by Dr.

Harold Kroto in his new materials prize lecture at the March 1992 meeting of the American Physical Society be adopted for fullerene tubules ("Simple Recipe Yields Fullerene Tubules," SN: 7/18/92, p.36).

As he discussed the evidence for elongated fullerenes, Dr. Kroto held up a large wire model that he dubbed a "zeppelene." It is certainly a descriptive name for this form of the material and would add that sometimes-necessary touch of humor to discussions and papers.

Steve Emmett
Herndon, Va.

Address communications to:
Editor, SCIENCE NEWS
1719 N St., N.W.
Washington, DC 20036

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All letters subject to editing.

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